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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,649	09/30/2003	E. Willis Lacy	84499	9500
23501	7590	10/05/2005		
NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION OFFICE OF COUNSEL, CODE XDC1 17320 DAHLGREN ROAD DAHLGREN, VA 22448-5110			EXAMINER CLEMENT, MICHELLE RENEE	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/677,649

Applicant(s)

LACY ET AL.

Examiner

Michelle (Shelley) Clement

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell (US Patent # 4,492,166) in view of Bender et al. (US Patent # 4,982,668). Purcell discloses a cylindrically shaped ordnance device comprising an explosive charge, a fragment layer including a plurality of preformed failure prone fragments, and a wrap element having a first layer and a second layer, the first layer disposed between the second layer and the fragment layer, the first layer composed of a compressible foam material of lower density than the second layer. The fragment layer comprises a plurality of preformed inert fragments interspersed with the preformed failure prone fragments. Although Purcell does not expressly disclose a metal buffer element disposed between the explosive charge and the fragment layer, Bender et al. does. Bender et al. teaches a cylindrically shaped ordnance device comprising an explosive charge and a fragment layer including a plurality of preformed failure prone fragments wherein a metal sheet (i.e. buffer element) separates the explosive charge from the fragments. One of the stated purposes of the plate is to reliably contain the explosion and gases until the fragments can be

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simultaneously ejected. Purcell and Bender et al. are analogous art because they are from the same field of endeavor: fragmenting ordnance. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the metal liner element as taught by Bender et al. with the ordnance device as taught by Purcell. The suggestion/motivation for doing so would have been to obtain a device that had more reliable ejection of the fragments as suggested by Bender et al. Purcell and Bender et al. disclose the claimed invention except for the metal liner (buffer element) explicitly being a copper material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the liner of copper, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Purcell and Bender et al. discloses the claimed invention except for the specific dimensions including the width-to-charge-diameter, the thickness of the liner element, and the diameter of the explosive charge. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the specific dimensions, since it has been held that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device the claimed device was not patentably distinct from the prior art device. *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 and MPEP 2144.04 (IV). Furthermore, where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Held (US Patent # 5,544,589), Lips et al. (US Patent # 5,131,329), and Mescall et al. (US Patent # 4,089,257).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

